

## CLAIMS

1. A wireless communication system in which a wireless station transmits a reception acknowledgement signal in response to reception of a data frame from another wireless station, the system comprising means of controlling a transmission rate of the reception acknowledgement signal based on the number of retransmissions of the data frame.

2. The wireless communication system according to claim 1, wherein the means controls the transmission rate of the reception acknowledgement signal based on the number of retransmissions of the data frame.

3. The wireless communication system according to claim 2, wherein the means makes the transmission rate lower than a current transmission rate when the number of retransmissions of the data frame is greater than a first predetermined value.

4. The wireless communication system according to any one of claims 1 to 3, wherein the means controls the transmission rate of the reception acknowledgement signal based on the number of successive successes for the data frame.

5. The wireless communication system according to claim 4, wherein the means makes the transmission rate higher than the current transmission rate when the number of successive successes for the data frame is greater than a second predetermined value.

6. The wireless communication system according to any one

of claims 1 to 5, wherein the wireless station and another wireless station are an access point and a mobile communication terminal in a wireless LAN system.

7. A method of controlling transmission of a reception acknowledgement signal in a wireless communication system in which a wireless station transmits a reception acknowledgement signal in response to reception of a data frame from another wireless station, the method comprising the step of controlling a transmission rate of the reception acknowledgement signal based on the number of retransmissions of the data frame.

8. The method of controlling transmission of a reception acknowledgement signal according to claim 7, wherein in the step the transmission rate of the reception acknowledgement signal is controlled based on the number of retransmissions of the data frame.

9. The method of controlling transmission of a reception acknowledgement signal according to claim 8, wherein in the step the transmission rate is made lower than a current transmission rate when the number of retransmissions of the data frame is greater than a first predetermined value.

10. The method of controlling transmission of a reception acknowledgement signal according to any one of claims 7 to 9, wherein in the step the transmission rate of the reception acknowledgement signal is controlled based on the number of successive successes for the data frame.

11. The method of controlling transmission of a reception

acknowledgement signal according to claim 10, wherein in the step the transmission rate is made higher than the current transmission rate when the number of successive successes for the data frame is greater than a second predetermined value.

12. The method of controlling transmission of a reception acknowledgement signal according to any one of claims 7 to 11, wherein the wireless station and another wireless station are an access point and a mobile communication terminal in a wireless LAN system.

13. A wireless station that transmits a reception acknowledgement signal in response to a data frame transmitted from another wireless station, the wireless station comprising means of controlling a transmission rate of the reception acknowledgement signal based on the number of retransmissions of the data frame.

14. The wireless station according to claim 13, wherein the means controls the transmission rate of the reception acknowledgement signal based on the number of retransmissions of the data frame.

15. The wireless station according to claim 14, wherein the means makes the transmission rate lower than a current transmission rate when the number of retransmissions of the data frame is greater than a first predetermined value.

16. The wireless station according to any one of claims 13 to 15, wherein the means controls the transmission rate of the reception acknowledgement signal based on the number of successive successes

for the data frame.

17. The wireless station according to claim 16, wherein the means makes the transmission rate higher than the current transmission rate when the number of successive successes for the data frame is greater than a second predetermined value.

18. The wireless station according to any one of claims 13 to 17, wherein the wireless station is one of an access point and a mobile communication terminal in a wireless LAN system.

19. A program that allows a computer to perform an operation of a wireless station that transmits a reception acknowledgement signal in response to a data frame transmitted from another wireless station, the program comprising a process of controlling a transmission rate of the reception acknowledgement signal based on the number of retransmissions of the data frame.